

Title (en)

MACHINE COMPRISING A BACKUP BEARING WITH A LIQUID METAL ANTI-FRICTION LAYER

Title (de)

MASCHINE MIT FANGLAGER MIT GLEITSCHICHT AUS FLÜSSIGMETALL

Title (fr)

MACHINE MUNIE D UN PALIER D ACCUEIL AVEC UNE COUCHE DE GLISSEMENT EN MÉTAL LIQUIDE

Publication

EP 2247864 B1 20121212 (DE)

Application

EP 09717137 A 20090302

Priority

- EP 2009052458 W 20090302
- DE 102008012603 A 20080305

Abstract (en)

[origin: CA2717634A1] A machine has a base (2), a rotating element (4) and at least one bearing system (6). Said bearing system (6) has an operating bearing (7) and a backup bearing (8) associated with the operating bearing (7). The backup bearing (8) has a base bearing ring (9) and a rotating element bearing ring (10) that is rotationally arranged relative to the base bearing ring (9). In a normal operating mode of the machine, the rotating element (4) is permanently received by the operating bearing (7) relative to the base (2) in a contact-free manner so that the rotating element bearing ring (10) does not rotate relative to the base bearing ring (9). In a special mode of operation of the machine, in which the rotating element (4) is not received by the operating bearing (7) in a contact-free manner, the rotating element (4) sets the rotating element bearing ring (10) rotating relative to the base bearing ring (9) so that the rotating element (4) is at least temporarily received with contact via the backup bearing (8). A liquid-metal anti-friction layer (11) is arranged between the base bearing ring (9) and the rotating element bearing ring (10).

IPC 8 full level

F16C 33/10 (2006.01); **F16C 39/02** (2006.01)

CPC (source: EP US)

F16C 33/10 (2013.01 - EP US); **F16C 39/02** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102008012603 A1 20090910; DE 102008012603 B4 20100708; BR PI0908551 A2 20150922; CA 2717634 A1 20090911; DK 2247864 T3 20130318; EP 2247864 A1 20101110; EP 2247864 B1 20121212; ES 2398191 T3 20130314; RU 2010140623 A 20120410; RU 2483414 C2 20130527; US 2011116732 A1 20110519; WO 2009109548 A1 20090911

DOCDB simple family (application)

DE 102008012603 A 20080305; BR PI0908551 A 20090302; CA 2717634 A 20090302; DK 09717137 T 20090302; EP 09717137 A 20090302; EP 2009052458 W 20090302; ES 09717137 T 20090302; RU 2010140623 A 20090302; US 92088509 A 20090302